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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/557,296

11/18/2005

Ryozo Setoguchi .

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EXAMINER

CHU, DAVID H

ART UNIT

PAPER NUMBER

2628

MAIL DATE

DELIVERY MODE

07/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/557,296	Applicant(s) SETOGUCHI ., RYOZO	
	Examiner DAVID H. CHU	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8 and 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 8, 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasaki (PGPUB Document No. US 2002/0005856).**

3. Note with respect to claim 8,

Sasaki teaches:

A method for generating/displaying a plane shape, comprising the steps of:

- Setting a normal line, which becomes a tangent plane of an object shape at each vertex of a triangle shape plane patch which is a basic form necessary for generating/displaying the object shape
- Decomposing said set normal line on a tangent plane at a vertex of the triangle shape plane path
- Specifying a necessary tangent line
- Based on the specified tangent line, determining between two corresponding vertexes of said triangle shape plane patch, a position of the normal line that becomes a new tangent plane of the subject shape and

- Determining a direction of the normal line by normal lines at two vertexes

[Sasaki teaches using normal vectors n_1 and n_2 at vertices P1 and P2 and a plane A perpendicular to the normal vectors to create a tangent vector B. Further, Sasaki teaches splitting the interval between vertices P1 and P2

Further Sasaki teaches that the interpolation/splitting teaching is done on triangle polygons as well]

[Sasaki, 0126, 0129, 0151]

4. Note with respect to claim 15,

Sasaki teaches:

The method for generating/displaying a plane shape according to claim 8, wherein,

- New normal lines are set sequentially between vertex normal lines or between sides of said triangle shape plane basic patch, thus forming a new triangle shape plane patch with said normal lines

[The new normal line n_{12} n_{34} in FIG. 15 of Sasaki]

5. Note with respect to claim 16,

Sasaki teaches:

The method for generating/displaying a plane shape according to claim 8, wherein,

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- New normal lines are set sequentially and repeatedly between vertex normal lines or between all triangle shape plane patches

[The new normal line n_{12} n_{34} in FIG. 15 of Sasaki]

6. Note with respect to claim 17,

Sasaki teaches:

The method for generating/displaying a plane shape according to claim 8, wherein,

- Setting of new normal lines based on triangle shape lane patch formed by set normal lines is sequentially performed repeatedly until reaching a display precision of the object shape

[Sasaki teaches determining the level of detail of an object based on the object's distance from a view point. Sasaki also teaches carrying out the splitting process based on the processing capacity of the hardware that performs the process]

[0273, 0281]

7. Note with respect to claim 18,

Sasaki teaches:

The method for generating/displaying a plane shape according to claim 8,
wherein,

- The method is executed by a system for selecting a basic patch which is set with a normal line among basic triangle shape plane patches representing a schematic shape of the object shape

[The basic patch is any polygonal shape. The shapes are either quadrilateral or triangular as stated above]

8. Note with respect to claim 19,

Sasaki teaches:

The method for generating/displaying a plane shape according to claim 8,
wherein,

- A new normal line is set by sequentially selecting triangle shape plane basic patch on which a normal line is set, thus forming an entire shape of the object shape recursively

[Sasaki teaches carrying out the splitting process until it meets the level of detail threshold of an object]

Response to Arguments

9. Applicant's arguments with respect to claims 8 and 15-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID H. CHU whose telephone number is (571)272-8079. The examiner can normally be reached on M-F 9:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kee M Tung/
Supervisory Patent Examiner, Art Unit 2628

DHC

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